

Claims:

1. Use of a single-cell protein material for the preparation of a pharmaceutical or nutritional preparation for the treatment and/or prevention of atherosclerosis, coronary heart disease, stenosis, thrombosis, myocardial infarction, stroke and fatty liver in an animal.
2. Use of a single-cell protein material for the preparation of a pharmaceutical or nutritional composition for the treatment and/or prevention of hypercholesterolemia.
3. Use of a single-cell protein material for the preparation of a pharmaceutical or nutritional composition for lowering the concentration of homocysteine in the plasma.
4. Use of a single-cell protein material for the preparation of a pharmaceutical or nutritional cardio protective composition.
5. Use of a single-cell material for the preparation of a pharmaceutical or nutritional for changing the fatty acyl pattern, and for improving the lipid homeostasis.
6. Use of a single-cell protein material in accordance with one of the preceeding claims, wherein said animal is a human.
7. Use of a single-cell protein material in accordance with one of the preceeding claims, wherein said animal is an agricultural animal, such as gallinaceous birds, bovine, ovine, caprine or porcine mammals.
8. Use of a single-cell protein material in accordance with one of the preceeding claims, wherein said animal is a domestic or pet animal, such as dog or cat.
9. Use of a single-cell protein material in accordance with one of the preceeding claims, wherein said animal is a fish or shellfish, such as salmon, cod, Tilapia, clams, oysters, lobster or crabs.
10. Use in accordance with one of the preceeding claims, wherein said single-cell material is a microbial culture comprising methanotrophic bacteria.
11. Use in accordance with claim 9, wherein said microbial culture further comprises one or more species of heterotrophic bacteria.

12. Use in accordance with claim 10, wherein said microbial culture comprises a combination of microbial culture comprising *Methylococcus capsulatus*, *Ralstonia sp.*, *Brevibacillus agri* and *Aneurinibacillus sp.*
- 5 13. Use in accordance with one of the preceding claims wherein *Methylococcus capsulatus* is the main or sole ingredient of the SPC material.
- 10 14. Use in accordance with one of the preceding claims, wherein the single-cell culture is produced by continuous fermentation, preferably operated with 2-3% biomass (on a dry weight basis).
- 15 15. Use in accordance with one of the preceding claims, wherein the single-cell material after fermentation is subjected to centrifugation in an industrial continuous centrifuge, preferably at 3,000 rpm, followed by ultrafiltration using membranes having an exclusion size of preferably 100,000 Daltons.
- 20 16. Use in accordance with claim 15, wherein the single-cell material further is subjected to a sterilization step, preferable in a heat exchanger.
17. Use in accordance with one of the claims 12-16, wherein the single-cell material further is subjected to a homogenization step.
- 25 18. Use in accordance with one of the claims 12-17, wherein the single-cell material is dried by spray drying.
19. Use in accordance with claim 16, wherein prior to spray drying the material is held in a storage tank at a temperature of less than 20°C and a pH of less than about 6.5.
- 30 20. Use in accordance with one of the claims 1-19, wherein said single-cell material is derived from fermentation on hydrocarbon fractions or on natural gas.
21. Use in accordance with one of the claims 1-20, wherein the composition is a food grade product or additive, e.g. an animal feed or pet food.